

**USP21 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2147a**

**Specification**

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**USP21 Antibody (C-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">O9UK80</a>
Other Accession	<a href="#">O2KJ72</a>
Reactivity	<b>Human</b>
Predicted	<b>Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>62656</b>
Antigen Region	<b>406-436</b>

**USP21 Antibody (C-term) - Additional Information**

**Gene ID** 27005

**Other Names**

Ubiquitin carboxyl-terminal hydrolase 21, Deubiquitinating enzyme 21, Ubiquitin thioesterase 21, Ubiquitin-specific-processing protease 21, USP21, USP23

**Target/Specificity**

This USP21 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 406-436 amino acids from the C-terminal region of human USP21.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

USP21 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**USP21 Antibody (C-term) - Protein Information**

**Name** USP21 {ECO:0000303|PubMed:10799498, ECO:0000312|HGNC:HGNC:12620}

**Function** Deubiquitinates histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator (By similarity). Deubiquitination of histone H2A releases the repression of di- and trimethylation of histone H3 at 'Lys-4', resulting in regulation of transcriptional initiation (By similarity). Regulates gene expression via histone H2A deubiquitination (By similarity). Deubiquitinates BAZ2A/TIP5 leading to its stabilization (PubMed:[26100909](#)). Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates (PubMed:[10799498](#)). Also acts as a negative regulator of the ribosome quality control (RQC) by mediating deubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS20/uS10, thereby antagonizing ZNF598-mediated 40S ubiquitination (PubMed:[32011234](#)).

#### Cellular Location

Cytoplasm. Nucleus

#### Tissue Location

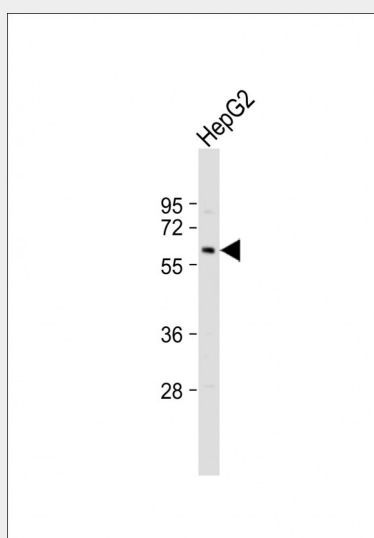
Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.

### USP21 Antibody (C-term) - Protocols

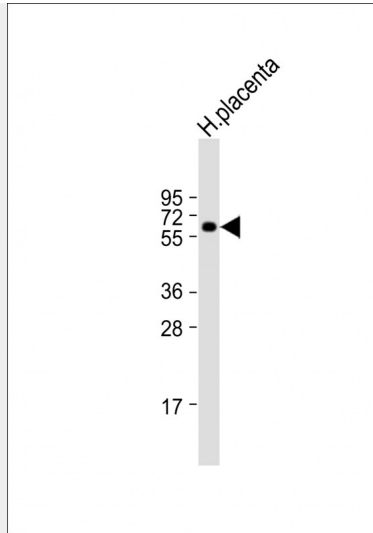
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

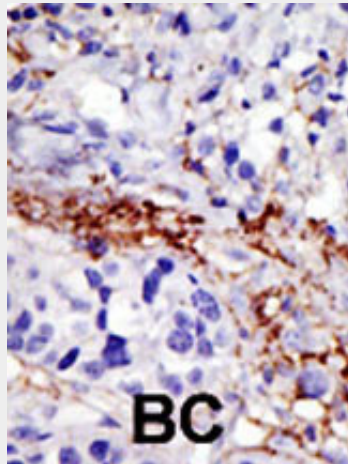
### USP21 Antibody (C-term) - Images



Anti-hUSP21-N421 at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-USP21 Antibody (C-term) at 1:1000 dilution + human placenta lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### **USP21 Antibody (C-term) - Background**

USP21 is a ubiquitin-specific protease, an enzyme that removes ubiquitin from ubiquitinated proteins. The encoded protein belongs to the C19 peptidase family, also known as family 2 of ubiquitin carboxyl-terminal hydrolases. This protein has been reported to be capable of removing NEDD8 from NEDD8 conjugates.

### **USP21 Antibody (C-term) - References**

- Puente, X.S., et al., Nat. Rev. Genet. 4(7):544-558 (2003).
- Gong, L., et al., J. Biol. Chem. 275(19):14212-14216 (2000).
- Hillier, L.D., et al., Genome Res. 6(9):807-828 (1996).
- Smith, T.S., et al., Biochim. Biophys. Acta 1490 (1-2), 184-188 (2000).